CLAIM AMENDMENTS

Please amend the claims as follows.

1. Previously cancelled.

2. Previously cancelled.

3. Previously cancelled.

4. Previously cancelled.

5. (Original) A reconfigurable computing chip comprising an on-chip configuration cache containing a multiplicity of stored configurations, wherein each configuration is identified by a unique off-chip address used to fetch that configuration.

6. (Previously amended) The reconfigurable computing chip of Claim 5, where each configuration is compressed.

7. (Previously amended) The reconfigurable computing chip of Claim 5, where the identification of the address is performed using contents-addressable memory.

8. Previously cancelled.

9. Previously cancelled.

10. Previously Cancelled.

11. (Previously added) The reconfigurable computing chip of claim 5, wherein the on-chip configuration cache includes an compressed cache.

12. (Previously added)   The reconfigurable computing chip of claim 5, wherein the on-chip configuration cache includes a decompressed cache.

13. (Previously added)   The reconfigurable computing chip of claim 12, further comprising an active configuration plane configured from configuration content retrieved from the decompressed cache.

14. Please cancel claim 14, without prejudice.

15. (Currently Amended)   The reconfigurable computing chip of claim ~~14~~ 12, wherein the configuration content in the decompressed cache is promoted from the compressed cache.

16. (Currently Amended)   A method of configuring a reconfigurable chip, the method comprising:

      decompressing configuration content resident within an on-chip compressed cache; and

      storing the decompressed configuration content in an on-chip decompressed cache from which an active configuration plane is configured, wherein each decompressed configuration within the decompressed cache is identified by a unique off-chip address used to fetch that configuration.

17. (Previously added)   A method of configuring a reconfigurable chip according to claim 16, further comprising:

configuring an active configuration plane of the reconfigurable chip from configuration content in the on-chip decompressed cache.

18. (Currently Amended)   A method of configuring a reconfigurable chip according to claim 17, the element of configuring comprising:

decoding configuration content from the on-chip decompressed cache; and

applying the decoded configuration content to intersections of select rows and columns of at least a subset of the configuration plane, including a multiplicity of such intersections for the same configuration content to effectively reconfigure the subset of the configuration plane.

19. (Currently amended)   A method of configuring a reconfigurable chip according to claim 18, the element of configuring further comprising:

changing at least a subset of a computing element's configuration; and

holding fixed at least some of a storage element's configuration to implement data-in-place reconfiguration of the reconfigurable chip.

20. (Previously added)   A system comprising:

a reconfigurable chip including an on-chip configuration cache containing a multiplicity of stored configurations, wherein each configuration is identified by a unique off-chip address used to fetch that configuration; and

an external storage, coupled with the reconfigurable chip, from which at least a subset of the multiplicity of stored configurations may be fetched.

21. (Previously added)   A system according to claim 20, wherein each configuration is

compressed.

22. (Previously added)   A system according to claim 20, wherein the identification of the

addresses is performed using content-addressable memory